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## Accumulative Index of Publications and Programs

1. Form numbers of publications included in the 7090 Systems Reference Library are listed below. Abstracts will be found in the 7090 Bibliography, A28-6306, or in Section 2 of this Newsletter. Technical Newsletters -- Notices of changes and corrections to publications -- should be filed with the item to which they apply. New entries in this list are bracketed.

SUBJ CODE	FORM NUMBER	TECHNICAL NEWSLETTERS	ABBREVIATED TITLE
00	GENERAL INFORMATION		
	A22-6686-1		7090 DPS Configuration
	A22-6689-2		7090 DPS Configuration
	A22-6764-0		7094 Mod II Configurator
	A28-6306-2		7090 7094 Bibliography
01	MACHINE SYSTEM		
	A22-6528-6		IBM 7090 Principles of Op.
	A22-6535-0	N22-0149 N22-0171	Op Guide for 7090 DP System
	A22-6703-1	N22-0147 N22-0178	IBM 7094 Principles of Op.
	A22-6761-0		IBM 7094 DPS Bulletin
	A22-6803-1		7040 7090/7094 Directly Couple
	D22-6508-2		709/7090 DP Systems
03	INPUT/OUTPUT		
	A22-6660-0		7000 Unit Record Equip Ref Man
	A22-6744-0		7090 7094 1414-6 IO Synchron
	A26-5754-0	N26-0069	1011 Paper Tape Reader
05	MAGNETIC TAPE		
	A22-6589-2	N22-0120	Magnetic Tape Units
	A22-6589-3*		Magnetic Tape Units
	A22-6616-1		IBM 7340 Hypertape Drive
	A22-6746-0		7090 7094 7340 Hypertape Drive
07	DISK AND DRUM STORAGE		
	A22-6747-1		7090 7094 7320 Drum Storage
	A22-6784-0		1301 1302 Sequential Data Org
	A22-6785-0		7090/7094 II 1301 1302
10	AUXILIARY EQUIPMENT		
	A22-6570-1		7765 Paper to Mag Tape Convert
13	SPECIAL AND CUSTOM FEATURES		
	G22-6587-1		Tape Switch Feature for - 729
	L22-6554-2		7090 Storage Clock & Timer
	L22-6636-1		Additional Storage for 7090
	L22-6641-3		7090 Multiprogramming Package
	L22-6767-0		7090 7094 7253 Mod 1 Core File
15	PHYSICAL PLANNING SPECIFICATIONS		
	A22-6809-0	N22-0159	7404 7634 Graphic Unit
	C22-6681-2	N22-0150 N22-0165 N22-0184	I/O Phys Plan 7000 1410 Sys
	C22-6706-1	N22-0151 N22-0156	7090/7094 Physical Planning
	C22-6811-0		7404/7634 Phys Plan Tentative
	F24-1052-1	N24-0042	GI Manual Physical Planning
	J22-6727-0		7320 Drum Storage Phys Plan
19	ORIGINAL EQUIPMENT MANUFACTURERS INFORMATION		
	A22-6619-3		7330 Magnetic Tape Unit
	A22-6643-2		729 II IV V & VI Mag Tape Unit
	A22-6701-0	N22-0055 N22-0180	1414 I/O Synchronizer

	A22-6725-0	N22-0082			IBM 7631 File Control
	A22-6807-0				7340 OEMI
20	PROGRAMMING SYSTEMS - GENERAL				
	C20-1604-2				0704 0709 7040 7044 Cata Prog
21	SYMBOLIC ASSEMBLY SYSTEMS				
	328-1219-0				SOS-Ref-Man Distrib-1
	328-1262-0				SOS-Ref-Man Distrib-2
	328-1377-0				SOS-Ref-Man Distrib-3
	328-1395-0				SOS-Ref-Man Distrib-4
	328-1406-0				SOS-Ref-Man Distrib-5
	328-1624-0	N28-0047			SOS-Ref-Man Distrib-6
	C28-6235-2	N28-0084	N28-0113	N28-0115	0709 7090 FAP Ref Man
		N28-0130	(N28-0152)		
	C28-6235-3*	N28-0113	N28-0115	N28-0130	0709 7090 FAP Ref Man
		(N28-0152)			
	C28-6235-4*	(N28-0152)			0709 7090 FAP Ref Man
	C28-6311-3	N28-0128			7090 MAP Language
	C28-6311-4*				7090 MAP Language
	C28-6392-0	N28-0141			7090/94 IBSYS V13 MAP Manual
23	COMMERCIAL TRANSLATOR				
	F28-8043-0				IBM Commercial Translator
	J28-6169-1	N28-0057	N28-0068		0709 7090 Commercial Trans Man
	J28-6258-0				0709 7090 1301-Comm-Trans-Supp
24	COBOL				
	220-8045-0				Report to Conf on DS Languages
	C28-6391-0				7090/94 IBSYS V13 COBOL Lang
	F28-8053-1	N28-0019			COBOL
	F28-8053-2*				COBOL
	J28-6310-0				7090 7094 COBOL Comparison
	J28-6260-3*				IBJOB Part 5 - COBOL Compiler
25	FORTRAN				
	C28-6054-5	N28-0147			7090 FORTRAN-2 Programming
	C28-6066-5	N28-0114	N28-0119	N28-0127	709/7090 FORTRAN Operations
	C28-6066-6*	N28-0127			709/7090 FORTRAN Operations
	C28-6274-1	N28-0051	N28-0069	N28-0107	7090/7094 FORTRAN IV Language
	C28-6274-2*	N28-0107			7090/7094 FORTRAN IV Language
	C28-6274-3*				7090/7094 FORTRAN IV Language
	C28-6377-0				7090/7094 FORTRAN IV Language
	C28-6390-0				7090/94 IBSYS V13 FORTRAN IV Lang
	F28-8074-2				FORTRAN
	F28-8074-3*				FORTRAN
	J28-6135-0				32K 709/7090 FORTRAN
	J28-6190-2	N28-0132			FORTRAN I/O Package for 32K
27	PROCESSOR OPERATING SYSTEM				
	C28-6275-3	N28-0116	N28-0122	N28-0123	7090 7094 IBJOB Processor
	C28-6275-4*	N28-0122			7090 7094 IBJOB Processor
	C28-6275-5*				7090 7094 IBJOB Processor
	C28-6362-1				7090/94 IBSYS Specs
	C28-6389-0	N28-0140			7090 IBSYS V13 IBJOB Processor
	C28-6393-0				7090/94 IBSYS V13 IBJOB Debug Pkg
28	REPORT PROGRAM GENERATOR				
	J28-6166-1				SHARE 7090 9 PAC Part 1
	J28-6167-0				SHARE 7090 9 PAC Part 2
	J28-6168-0				SHARE 7090 9 PAC Part 3
	J28-6211-3				SHARE 7090 9 PAC Supplement
30	INPUT/OUTPUT CONTROL SYSTEM				
	C28-6345-4				7090/94 IBSYS V13 IOCS
	C28-6773-0				7090/7094 IOCS Analysis Guide
	J28-8064-1				1301 IOCS for 1410 and 7000
32	UTILITY PROGRAMS				
	C28-6321-0				7090/7094 Util Progs with 7340
	C28-6364-4				7090 Utilities
	J28-6080-0				709 Utility Programs
33	SORT-MERGE				
	C28-6036-0				Generalized Sort for 709
	C28-6052-0				Generalized Merge for 709
	C28-6365-0	N28-0110	N28-0134	N28-0127	7090 7340 Sort Manual
	C28-6365-1*	N28-0110	N28-0134	N28-0127	7090 7340 Sort Manual
	C28-6378-0				7090/7094 Sort Timing Tables
	C28-6780-0				7090/7094 Sort PSAG
	F28-8001-0				Sorting Methods for DP Systems

	J28-6043-1		Sort 709 - Sort Times for 7090
	J28-6059-0		0709 Sort Addenda -+ Errata
	J28-6061-0		Addenda to Merge 709
	J28-6138-0		Sort Times for 7090 with 729VI
	J28-6156-0		7090 General Sort with 7340
35	SYSTEM SIMULATOR		
	C28-6252-0	N28-0071	7090 7094 7040 7044 Support-PK
	J24-1427-0		1410 Simul with 704, 709, 7090
	J26-5626-0	N26-0008	Simul 1710 on 709/7090
	J28-6042-1		Simul of 7070 on 704 and 7090
	J28-6206-1		Simul 7750 on 7090/7094
36	SUPERVISORS - MONITORS		
	(C28-6248-4)		7090/94 IBSYS V13 Sys Monitor
	C28-6299-0		7090 7094 IBSYS-IOEX PSAG
	C28-6355-3	N28-0136 (N28-0161)	7090 IBSYS Operator Guide
	C28-6382-3		7090-7040 DC Programmers Guide
	C28-6383-2		7040-7090 Direct Couple Op Sys
	C28-6384-2		7040-7090 Direct Couple Op Sys
48	MISCELLANEOUS PROGRAMS		
	C28-6386-1		7090/7094 IBSYS Oper System
	J28-0238-0		1401 Peripheral Process Sys
	J28-6173-0		7000 1400 Output Editing-Sys
	J28-6174-0		S-Program for IBM 7090
	J28-8023-0		Machine Optimal Approximations
80	INSTALLATION SUPPLIES		
	X22-1245-1		7090 Physical Plan Templates
	X22-6126-0		0711 Control Panel Diagram
	X22-6127-1		0716 Control Panel Diagram
	X22-6665-1		1301 Phys Plan Templates
	X22-6666-1		I/O Components Templates
	X22-6669-0		7340 Input Output Hypper Tmplat
	X22-6682-0		7090 Reference Card
	X22-6691-1		7094 Reference Card
	X22-6785-4		7000 Tape Characteristics Card
	X24-6518-0		1011 Control Panel Diagram
	X28-0784-0		0709 Share Symb Coding Form
	X28-1213-0		SOS Ref Man Binder
	X28-1305-0		Comm Translator Procedure
	X28-1306-0		Comm Translator Data Descript
	X28-1464-1		COBOL Program Sheet
	X28-1520-0		COBOL Reference Card
	X28-1522-0		0709 7090 Comm Trnsltr Envrmt
	X28-6140-0		7090-9PAC IOCS Control Cards
	X28-6141-0		7090-9PAC-FP Dictionary DFF
	X28-6142-0		7090-9PAC-FP Vertical Chng Def
	X28-6143-0		7090-9PAC-FP Update Chng Def
	X28-6144-0		7090-9PAC-FP Horizontal Chng
	X28-6145-0		7090-9PAC-FP Change Report Req
	X28-6146-0		7090-9PAC-RG Report Definition
	X28-6147-0		7090 9 PAC RG Field Parameters
	X28-6148-0		7090-9PAC-RG Dictionary Def
	X28-6333-0		7040/44/90/94 Symb Coding Form
	X28-6380-0		7090/7094 IOCS Ref Card
	X28-6388-0		7090/94 Oper Reference Card
	X28-7327-4		FORTTRAN Coding Forms
90	EDUCATION LITERATURE		
	F22-6517		Introd to DPS
	R22-9761-3	N22-0560	COBOL Educ Guide
	R22-9762-2		COBOL Practice Problems
	R25-1677-1		FORTTRAN Programming Prac Prob
	R25-9527-2		Educ Guide FORTTRAN Programming
99	OTHER SUPPLEMENTARY INFORMATION		
	C20-8089-2		Glossary for Info Processing

\* Minor Revision, Does Not Obsolete Prior Edition Also Listed.

Note - The following publications are superseded as indicated.

01	A22-6760-0	N22-0148	Not Replaced
01	N22-0117		Replaced by A22-6528-6
(20	N20-0016-2		Replaced by C20-1604-2)

21	C28-6235-0	N28-0029		Replaced by C28-6235-2
21	C28-6235-1*			Replaced by C28-6235-2
24	J28-6260-2	N28-0103	N28-0124	Replaced by C28-6391-0
(25	C28-6376-0	N28-0142		Not Replaced)
(27	C28-6385-0			Not Replaced)
30	N28-0096	N28-0105	N28-0121	Replaced by C28-6345-3
32	N28-0106	N28-0117	N28-0125	Replaced by C28-6364-4
36	N28-0091	N28-0118	N28-0135	Replaced by C28-6248-3
(36	N28-0139			Replaced by C28-6248-4)
36	N28-0140	N28-0144		Replaced by C28-6383-2
36	N28-0143			Replaced by C28-6384-2
36	N28-0145	N28-0148		Replaced by C28-6382-3

2. The Abstracts which follow are not included in the current issue of the Bibliography. New entries are identified by a vertical line to the left of the Abstract.

C28-6248-3 IBM 7090/7094 IBSYS OPERATING SYSTEM, VERSION 13: 36  
SYSTEM MONITOR (IBSYS)

This publication describes the use and general function of the System Monitor of the IBM 7090/7094 IBSYS Operating System, Version 13 (7090-PR-130). The IBSYS Operating System consists of a number of commercial and scientific programming aids operating under over-all control and direction of the System Monitor (7090-SV-918). It is designed to process sequentially a variety of unrelated jobs with little or no operator intervention. The system monitor includes the System Supervisor, the System Core-Storage Dump Program, the System Editor, the System Nucleus, and the Input/Output Executor. In general, the "Introduction" of this publication and the sections describing the System Supervisor and the System Core-Storage Dump Program are directed primarily to the applications programmer. The remaining sections are directed to the systems programmer.

C28-6345-3 IBM 7090/7094 IBSYS OP SYSTEM, VERSION 13: 30  
INPUT/OUTPUT CONTROL SYSTEM

This publication provides a description of the 7090/7094 Input/Output Control System in Version 13 of the IBSYS Operating System and includes detailed programming information. IOCS is a flexible programming system that automatically controls transmission of data to and from recording devices and makes the data readily available for processing. The publication contains discussions of basic concepts and explains the use of IOCS commands and routines. The techniques of sequential processing are discussed in the main body of the manual, and a separate section is provided on random processing. Several sample programs are included. Two forms of IOCS are contained in the IBJOB Subroutine Library and are used in conjunction with the Macro Assembly Program Full IOCS (7090-I/I-919) and is provided as an independent system for use with the IBM 7090/7094 FORTRAN II Assembly Program (IBSFAP). Differences in the two systems are made explicit in the publication. A third form, FORTRAN IOCS, is used by FORTRAN IV object programs.

C28-6355-3 IBM 7090/7094 IBSYS OP SYSTEM, VERSION 13: OPERATOR'S GUIDE 36

This publication provides the operator and machine-room personnel with complete instructions required to operate the IBM 7090/7094 IBSYS Operating System (Version 13).

Descriptions of System Monitor control cards, initial start procedures, system halts, and the online messages and their explanations are included in this publication.

C28-6386-1 IBM 7090/7094 IBSYS OPERATING SYSTEM, VERSION 13: SYMBOLIC 48  
UPDATE PROGRAM

This publication describes the capabilities of the Symbolic Update Program (7090-UT-978), the requirements for its implementation, and the pseudo-instructions it uses. This program operates under control of the IBM 7090/7094 IBSYS Operating System, Version 13, and allows users to modify serialized symbolic tapes, including those for the operating system itself.

C28-6389-0 7090/7094 IBSYS OPERATING SYSTEM, VERSION 13, IBJOB PROCESSOR 27

This publication describes the 7090/7094 IBJOB Processor and its components as it operates under IBSYS, Version 13. Included are descriptions of the IBJOB Processor, the functions that are performed by the components of the Processor, and the requirements for use of the Processor and its components. The publication is divided into three parts. The first part contains information for the application programmer, the second part contains information for the systems programmer, and the third part contains the text of all error messages for each component with appropriate explanations.

This publication describes the 7090/7094 FORTRAN IV language that is processed by the FORTRAN IV Compiler (IBFTC), #7090-FO-805, a component of the 7090/7094 IBJOB Processor, which, in turn, is a subset of the IBSYS Operating System (Version 13). FORTRAN IV is a problem-oriented programming language designed primarily for scientific computations, and it closely resemble the language of mathematics. It includes various types of arithmetic, control, input/output, and specification statements.

The COBOL language (Common Business Oriented Language) is a programming language closely related to English. This publication describes the COBOL language used with the 7090/7094 Data Processing System. Programs written in the COBOL language are translated by the 7090/7094 COBOL Compiler (7090-CB-806), which is a component of the 7090/7094 IBJOB Processor, a subset of the IBSYS Operating System (Version 13). Part I of this publication describes the 7090/7094 COBOL language so that programmers with no prior knowledge of COBOL can plan and write programs in the language. Part II of this publication contains examples, programming pointers, control card information, and error messages.

This publication provides detailed information for writing source programs in the 7090/7094 Macro Assembly Program (MAP) Language. Users of the MAP symbolic programming language are provided with an extensive set of pseudo-operations, as well as all 7090/7094 machine operations. The Macro Assembly Program (7090-SP-804), IBCMAP, is a component of the 7090/7094 IBJOB Processor and operates under the IBJOB Monitor.

This publication describes the IBJOB Processor Debugging Package for use with the IBSYS Operating System (Version 13). The debugging package is a programming aid that enables the user to obtain dynamic dumps of specified areas of core storage and machine registers during program execution. The package contains two separate facilities: Compile-Time Debugging for COBOL programs and Load-Time Debugging for FORTRAN IV and MAP programs. Load-time debug requests are processed by the IBJOB Debugging Processor (IBDBL), #7090-PR-807. Compile-time debug requests are associated with the COBOL compiler (IBCBC).

3. Program numbers of programming systems available for the IBM 7090 are listed below. The date of most recent modification is given. Abstracts and ordering instructions are found in Catalog of Programs and Programming Systems, C20-1604.

PROGRAM NAME	NUMBER	VERSION	MOD LEVEL	MOD DATE
COBOL Compiler -IBCBC-	7090-CB-806	5	( 4	06/01/65)
709/90 Commercial Translator	7090-CT-921	5	6	02/11/65
709/7090/32K FORTRAN	0790-FO-062	2	47	03/18/65
FORTTRAN IV Compiler - IBFTC-	7090-FO-805	5	( 4	06/01/65)
FORTTRAN II Under IBSYS	7090-FO-928	3	(32	06/01/65)
S Program	0709-IO-094	2	0	04/10/62
709/90	7090-IO-919	6	4	04/27/65
Restart Program	7090-IO-976	2	0	2/11/65
Library - IBLIB-	7090-LM-803	5	( 5	06/01/65)
7090/7094 IBSYS Processor	7090-PR-130	13	(6	06/01/65)
7040/7090 Direct Couple Oper Sys	7090-PR-161	1	2	3/12/65
IBDBL/IBJOB Debugging Processor	7090-PR-807	2	( 2	06/01/65)
7090/7094 90 PAC	7090-PR-924	4	2	3/25/64
7090/7094 IB Job Processor	7090-PR-929	5	0	2/11/65
7090/7094 Support Package for 7040/7044	7070-SI-124	3	0	10/08/63
IBM 7090/7094 Support Package for S/360	7090-SI-162	( 3)	0	(06/01/65)
7750 Simulator	7090-SI-946	1	0	12/12/62
Sort	0709-SM-066	1	20	3/20/62
Merge	0709-SM-067	1	13	5/30/61
7090/7094 Generalized Sort	7090-SM-922	7	6	05/10/65
Macro Assembly Program -IBMAP-	7090-SP-804	5	2	05/10/65
IBSFAP	7090-SP-920	3	0	7/31/63
Monitor -IBJOB-	7090-SV-801	5	4	05/10/65
Loader -IBLDR-	7090-SV-802	5	( 4	06/01/65 )
IBSYS	7090-SV-918	6	3	05/10/65
7090/7094 Hypertape Util Programs	709-UT-145	6	0	2/11/65
Disk Utility Package	7090-UT-927	3	1	04/27/65

Note - This SRL Newsletter was prepared on an IBM Magnetic Tape Selectric Typewriter.